

# LEGISLATIVE AUDIT DIVISION

Scott A. Seacat, Legislative Auditor  
John W. Northey, Legal Counsel  
Tori Hunthausen, IT & Operations Manager



Deputy Legislative Auditors:  
Jim Pellegrini, Performance Audit  
James Gillett, Financial-Compliance Audit

## MEMORANDUM

**TO:** Legislative Audit Committee Members

**FROM:** Wendy Kittleson, Information Systems Auditor

**DATE:** February 23, 2000

**RE:** Dept of Agriculture – State Hail Insurance Program  
Hail Insurance System Audit (00DP-06)

### Introduction

The Montana Hail Insurance Program provides hail insurance coverage on any crop grown in Montana. The program works closely with private insurance providers in the state, since many producers carry both state and private hail insurance. According to 1999 fiscal year-end reports, hail insurance premiums collected for the State Hail Insurance Program totaled \$2,827,338.

We performed an information system audit of the computerized Hail Insurance System, HAIL, administered by the Department of Agriculture. HAIL was created by the department and replaced the previous system in July 1999. This new system contains state insurance policy data, including, policy, loss claim, and payment information. The system interfaces accounts receivable information with the Statewide Accounting, Budgeting and Human Resource System (SABHRS).

Insurance policy forms are sent to the department for data entry into HAIL. HAIL calculates the total risk, premium and loss payment amounts according to the data entered. Premium amounts are based on the number of acres and the amount of coverage desired per acre, as well as the county in which the land lies and the type of crop grown. Loss claim forms are submitted to the Helena office, and hail insurance adjusters verify the amount of crop damage. Claim amounts are calculated by the system and verified against manual calculations prepared by adjusters. Claim amounts are determined by multiplying the acres damaged by the percentage of damage this storm, and then multiplied by the amount of coverage per acre. Loss payments are offset against outstanding premiums before checks are sent to policyholders.

HAIL also calculates the yearly distribution of funds to the state General Fund (2 percent) and the collecting counties (1.5 percent). The distribution is based on a percentage of premiums collected during the year less payments for loss claims. Payments are calculated annually in February, and had not been calculated on the HAIL system at the time of our audit.

### **Audit Objectives**

The objectives of this audit included ensuring hail insurance policies are input completely and accurately, and to ensure that risk and premium amounts are calculated accurately by the system. We reviewed controls to ensure cash collections, accounts receivable updates, and loss payments are processed completely and accurately. We also performed testing to verify access to data files and programs is limited to appropriate personnel, to ensure critical data fields converted accurately, and to verify that disaster recovery is documented and backup procedures are performed.

### **Audit Scope and Methodology**

The audit was conducted in accordance with governmental auditing standards published by the United States General Accounting Office. We evaluated controls implemented over HAIL by comparing the department's controls against criteria established by the American Institute of Certified Public Accountants and the electronic data processing industry.

During the audit, we reviewed hail insurance policies to verify critical fields were input correctly. We recalculated at-risk and premium amounts to ensure the system is calculating amounts accurately. We verified reports of policy input are complete based on policy information input.

We verified accounts receivable batch update reports were accurate based on policy input and collections and that the report is reviewed and approved by appropriate personnel. We verified procedures were in place for identifying and correcting rejected transactions. We verified that collections are updated to HAIL completely and accurately based on collection amounts posted to SABHRS.

We reviewed loss claims received and verified that critical fields were input accurately. We recalculated loss payment amounts to verify that payments are calculated accurately. We verified that appropriate personnel approve loss claims prior to payment.

We reviewed electronic access controls to determine if access privileges are granted according to users' responsibility for entering policy and loss information, transferring data to SABHRS, and system maintenance. We reviewed password parameters to ensure they are in compliance with state policy. We reviewed the conversion process as well as supporting documentation, and verified that critical fields converted accurately. We reviewed disaster recovery policies and procedures.

***Based on testing performed, we found controls to be effective over the HAIL system regarding input, processing, output, and system security.***

### **Audit Summary**

During the audit, we identified password parameters, documented disaster recovery, and a data conversion concern deemed not to have a significant effect on the successful operation of the State Hail Insurance Program. The current system version does not require the password parameters required in state policy, and a third party security software is cost prohibitive. Department personnel stated that they intend to upgrade in the future, which could provide the necessary password security. Currently, personnel are advised by department personnel to change HAIL passwords along with required network changes. Although the department has not documented its disaster recovery procedures, the department currently performs back-ups that are stored off-site. From the entire population, one isolated instance was identified in the conversion data. Agency personnel stated the conversion error would have been identified later in the year when reconciliations would have been performed prior to processing the 1.5 percent payment to counties and the 2 percent payment to the General Fund. The concerns are not specifically addressed in a report, but have been discussed with department management.

We would like to thank the agency for their help in performing the audit.